

SAFETY PRECAUTIONS

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents read and take the following precautions before operating the tractor. Equipment should be operated only by those who are responsible and instructed to do so.

IMPORTANT: In this manual references are made to positions of switches and components as located to the Left Hand and Right Hand side of the vehicle. In all situations the position described is when the operator is seated on the vehicle and looking forward.

THE TRACTOR

1. Read the Operator's Manual carefully before using the tractor. Lack of operating knowledge can lead to accidents.
2. Ensure any attached equipment or accessories are correctly installed, are approved for use with the tractor, do not overload the tractor and are operated and maintained in accordance with the instructions issued by the equipment or accessory manufacturer.
3. Use an approved ROPS or safety cab and seat belt for safe operation. Overturning a tractor without a ROPS or safety cab can result in death or injury.
4. Always use the seat belt with the ROPS or safety cab.
5. Use the handholds and step plates when getting on and off the tractor to prevent falls. Keep steps and platform clear of mud and debris.
6. Do not permit anyone but the operator to ride on the tractor there is no safe place for extra riders.
7. Remember that your tractor, if abused or incorrectly used can be dangerous and become a hazard both to the operator and bystanders. Do not overload or operate with attached equipment which is unsafe, not designed for the particular task or is poorly maintained.
8. Replace all missing, illegible, or damaged safety decals.
9. Keep safety decals clean of dirt and grime.

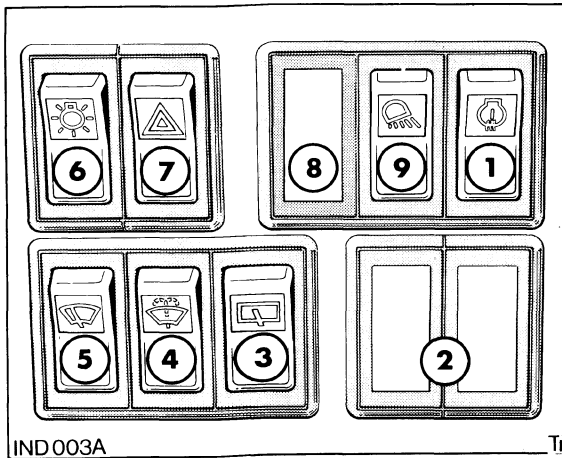
SERVICING THE TRACTOR

1. The cooling system operates under pressure which is controlled by the radiator cap. It is dangerous to remove the cap while the system is hot. Always turn the cap slowly to the first stop and allow the pressure to escape before removing the cap entirely.
2. Do not smoke while refuelling the tractor. Keep any type of open flame away. Wait for the engine to cool before refuelling.
3. Keep the tractor and equipment, particularly brakes and steering, maintained in a reliable and satisfactory condition to ensure your safety and comply with legal requirements.
4. To prevent fires or explosions keep open flames away from battery or cold weather starting aids. To prevent sparks which could cause explosion, use booster cables according to instructions in this manual.
5. Stop the engine, apply the handbrake and lower the loader and backhoe to the ground before performing any service on the tractor.
6. Escaping hydraulic/diesel fluid under pressure can penetrate the skin causing serious injury.

- **DO NOT** use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks.

- Stop the engine and relieve pressure before connecting or disconnecting lines.
 - Tighten all connections before starting the engine or pressurizing lines.
 - If fluid is injected into the skin obtain medical attention immediately or gangrene may result.
7. Do not attempt to service the air conditioning system. It is possible to be severely frostbitten or injured by escaping refrigerant. See your dealer for service.
 8. Do not modify or alter or permit anyone else to modify or alter this tractor or any of its components or any tractor function without first consulting your Dealer.
 9. The fuel oil in the injection system is under high pressure and can penetrate the skin. Unqualified persons should not remove or attempt to adjust a pump, injector, nozzle or any other part of the fuel injection system. Failure to follow these instructions can result in serious injury.
 10. Continuous long term contact with used engine oil may cause skin cancer. Avoid prolonged contact with used engine oil. Wash skin promptly with soap and water.
 11. Never allow anyone to stand or work under or reach through the loader lift arms when the loader is raised, unless the loader cylinders are blocked in the extended position using the loader arm support, see Section D, page 4 for instructions.
 12. Never allow anyone to stand under or work under a raised backhoe bucket or boom.
 13. Never attempt to repair or tighten hoses under pressure.
 14. Always check pivot pins, snap rings and main attaching bolts daily.
 15. When it is necessary to remove pins from the backhoe or loader that require hammer and drift, use only a brass hammer and a brass drift and wear safety glasses.
 16. Do not lubricate or make mechanical adjustments while the unit is in motion or when the engine is running. However, if minor engine adjustments must be made, apply the parking brake, securely block the wheels, and use extreme caution. Be certain that the loader is fully lowered or supported so that it cannot fall.
 17. Always wear safety goggles when servicing or repairing the machine.
 18. When it is necessary to tow the tractor, do not exceed 5 miles/h (8.0 km/h). Avoid towing the tractor over long distances. Tow only according to instructions in this manual.
 19. Adequately support the backhoe or loader when they are detached from the tractor.
 20. Some components on your tractor, such as the cylinder head gasket may contain asbestos. Breathing asbestos dust is dangerous to your health. You are therefore advised to have any maintenance or repair operations on such components carried out by your Dealer. If, however, service operations are to be undertaken on parts that contain asbestos, the essential precautions listed below must be observed:

CONTROLS, INSTRUMENTS AND OPERATION



3. Rocker Switches

1. Thermostart switch
2. Blanks for dealer installed accessories
3. Rear windshield wiper switch
4. Front windshield washer switch
5. Front windshield wiper switch
6. Tractor lights switch
7. Hazard warning lights switch
8. Blank for dealer installed accessories
9. Rear work lights switch

Thermostart Switch

The rocker switch is of the spring loaded return type, depress and hold the top of the switch to activate the thermostart. The thermostart switch should be used in conjunction with the key-start/stop switch for starting in temperatures below 40°F, see "KEY-START/STOP SWITCH" in this section for the correct operating procedure.

Accessories

The three blanking caps fitted in the panel may be removed, and rocker switches installed to actuate dealer installed accessories such as a rotating beacon, etc. Consult your Dealer for further details regarding accessories.

Rear Windshield Wiper Switch (with cab)

The single speed self parking rear windshield wiper is actuated when the top of the switch is depressed.

Front Windshield Washer Switch (with cab)

The rocker switch is of the spring loaded return type. Depress and hold the top of the switch to activate the electric windshield washer.

NOTE: The windshield washer jet protrudes from the lower windscreen frame. The angle of the jet may be adjusted if the point of a needle is inserted into the jet orifice and moved, as required. The reservoir for the windshield washer is located under the steering console, see Section D for servicing and filling.

Front Windshield Wiper Switch (with cab)

The two speed front windshield wiper is operated by a 3-way rocker type switch, the bottom position being off, the center position actuates the slow wiper speed and the top position actuating the fast speed. The wiper arm is self-parking.

Tractor Lights Switch

The rocker switch is of the 3-way type, the bottom position being off, the center position actuating the rear tail lights and the instrument panel lights, the top position actuating the rear tail lights and the instrument panel lights and the front tractor lights.

Hazard Warning Lights Switch

The switch is internally illuminated and when actuated will flash in unison with the tractor turn signals, and the green warning lights (1), Figure 4.

NOTE: Hazard warning lights are used when driving on the public highway. When a turn signal is made, the lights on one side of the tractor will flash, indicating a turn, while the lights on the other side will burn continuously. For your protection use the hazard warning lights when travelling on public roads unless prohibited by law. The hazard warning lights will only operate with the key-start/stop switch turned "ON".

LUBRICATION AND MAINTENANCE CHART

The numbers in the second column refer to the operations and illustrations contained in the following pages of this section.

[illegible]

ELECTRICAL SYSTEM

Alternator	12 V Heavy Duty
Output	Standard 55 amp (75 amp with air conditioning)
Regulator	Transistorised (with battery temperature sensor)
Ground (Earth)	Negative
Battery Type	128 amp. Hour Rating – 800 cold crank amps
Starting Motor	Positive Engagement, Solenoid Operated
Stop/Tail Light Bulb	5/21 W Bayonet Cap
Interior Light Bulb	10 W Festoon
Flasher Light Bulb	21 W Bayonet Cap
Work Light Bulbs	55W H3 Halogen
Instrument/Warning Light Bulbs	1.2 W Capless
Rocker Switch Bulbs	1.2 W Capless

BRAKES

Type	Wet Multi-Disc
Disc Diameter	8in (203.2mm)
Pedal Free Travel	1.5in (38mm)
Handbrake Type	Twin cable

STEERING

Type	Hydrostatic Power
Turns Lock to Lock	
2WD	4.1
FWD Left	3.1
Right	3.75
Pump Type	Gear – flow divided
Pump Output	
1000 rev/min:	4.7 U.S. Gal/min (3.0 Imp. Gal/min) (13.6 Litres/min)
2400 rev/min.	5.6 U.S. Gal/min (4.7 Imp. Gal/min) (18.0 Litres/min)
System Pressure	2,025 lbf/in ² ± 75 lbf/in ² (140 bar) ± 5 bar
Front Wheel Toe-in	0–0.24in (0–6mm)

REAR AXLE

Type	Double Reduction, Inboard Planetary
Differential Lock	Standard

OWNER ASSISTANCE

We at New Holland and your New Holland dealer want you to be completely satisfied with your investment. Normally any problems with your equipment will be handled by your dealer's Service Department. Sometimes, however, misunderstanding can occur. If your problem has not been handled to your satisfaction, we suggest the following.

1. Contact the owner or General Manager of the dealership, explain the problem, and request assistance. When additional assistance is needed, your dealer has direct access to our branch office.
2. If you cannot obtain satisfaction by doing this, contact the branch office in your area and provide them with:
 - Your name, address, and telephone number
 - Machine model and serial number
 - Dealership name and address
 - Machine purchase date and amount of use
 - Nature of problem

Atlanta

2000 Mountain Ind. Blvd.
Tucker, GA 30084
Telephone: (404) 723-3615
States: AL, FL, GA, KY, MS,
NC, SC, TN, VA

Dallas

P.O. Box 152141
Irving, TX 75015
Telephone: (214) 756-4919
States: AR, AZ, CA, CO, HI, KS,
LA, MO, NM, NV, OK, TX, UT

Minneapolis

P.O. Box 1342
Minneapolis, MN 55440
Telephone: (612) 887-4232
States: AK, IA, ID, IL, MN, MT,
ND, NE, OR, SD, WA, WI, WY

New Holland

500 Diller Avenue
New Holland, PA 17557
Telephone: (717) 285-8302
States: CT, DE, IN, MA, MD, ME,
MI, NH, NJ, NY, OH, PA, RI, VT,
WV

Calgary

Box 1616, Main P.O.
Calgary, AB
CANADA T2P 2M7
Telephone: (403) 569-3208

3. If you need further assistance contact:

*Service Department
Mail Station 500
New Holland North America, Inc.
New Holland, PA 17557*

When contacting your branch office or Service Department, be aware that your problem will likely be resolved in the dealership using the dealer's facilities, equipment, and personnel. So it is important that your initial contact be with the dealer.

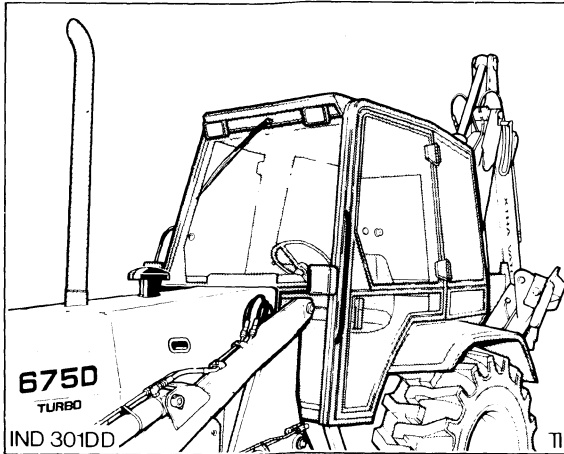
A Service Publications Catalog & Order Form is available which lists the operator's and service manuals for many prior model and most current model Ford - New Holland - Versatile tractors, equipment, and consumer products. To obtain a copy of this catalog, please call 1-800-635-4913.

CONTROLS, INSTRUMENTS AND OPERATION

The following pages in this section detail the location and function of the various instruments, switches and controls on your tractor. Before attempting to drive or operate the tractor, study this section carefully and ensure you are thoroughly familiar with all aspects of operation.

This Manual covers tractors with and less cab. Where there are obvious differences in location, appearance or operation of any of the controls, then each version is illustrated or described in the text. If in doubt about any aspect of operation of the tractor, consult your dealer.

Particular attention should be paid to the recommendations for running-in to ensure that your tractor will give the long and dependable service for which it was designed.



13. Ford All Weather Cab

Entry and exit from the cab is aided by wide doors, foot steps with anti-slip treads and convenient assist handles.

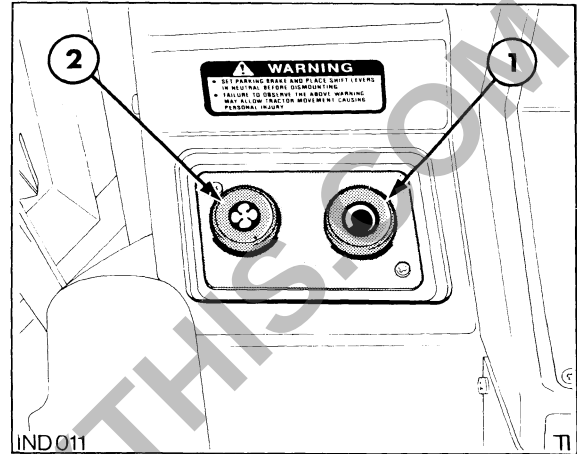
Both doors are fitted with pressurized gas struts, to assist opening and closing and to hold them in the fully open position. Heavy duty anti-burst locks, that may be locked from the outside by means of the keys provided, are shielded to prevent clothing being caught on entry or exit from the cab.

The upper side windows are frameless tinted glass and may be opened a few inches or completely, and attached to an adjacent window and locked.

The rear window is frameless tinted glass and may be opened and stowed above the operators head.

Excellent visibility is offered through the generous window areas and with the installation of an interior mirror and windshield wipe/wash facility.

Refer to Figures 14 to 18 and the following text for details of the cab climate controls.



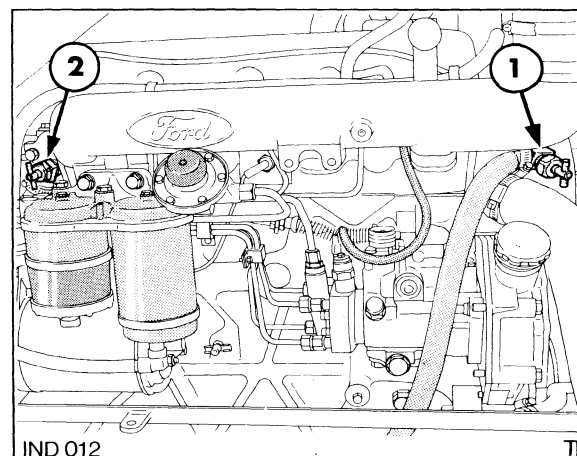
14. Heater/Defroster Controls

1. Heater temperature control
2. Blower control

Heater Temperature Control

Turn the control clockwise to increase the temperature of the air from the heater. Turn the control fully counter-clockwise to obtain unheated air from the heater vents.

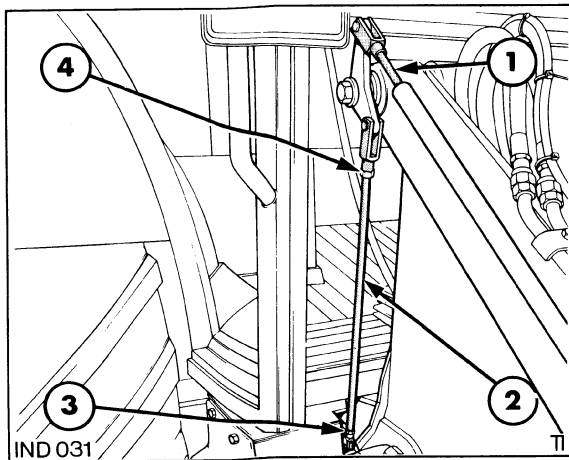
In warm weather it may be desirable to close the heater shut-off valves on the inlet pipe to the water pump and on the rear right-hand side of the cylinder head to isolate heated water from the heater assembly.



15. Heater Shut-off Valves

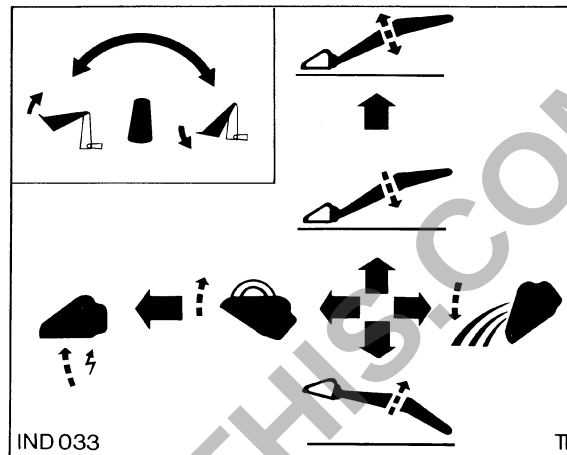
1. Valve at water pump
2. Valve at cylinder head

LOADER CONTROLS AND OPERATION



6. Hydro-Mechanical Self Levelling Linkage

1. Loader arm rod and tube assembly
2. Vertical linkage rod
3. Lower bellcrank and locknut
4. Upper locknut



8. Loader Control Lever Positions

- Fully rollback the loader bucket.
- Adjust the vertical linkage rod such that when the rod is re-assembled to the bellcrank the loader arm tube and rod assembly contact.

- Tighten the lower lock nut to 25 lbf.ft.(35 Nm) and the upper lock nut to 58 lbf.ft.(80 Nm).

The loader control lever positions as shown in Figure 8 are as follows:

Lever back – loader arms lift

Lever forward – loader arms lower

Lever fully forward – loader arms “float”

Lever left – loader bucket rollback

Lever fully left – loader bucket “return to dig”

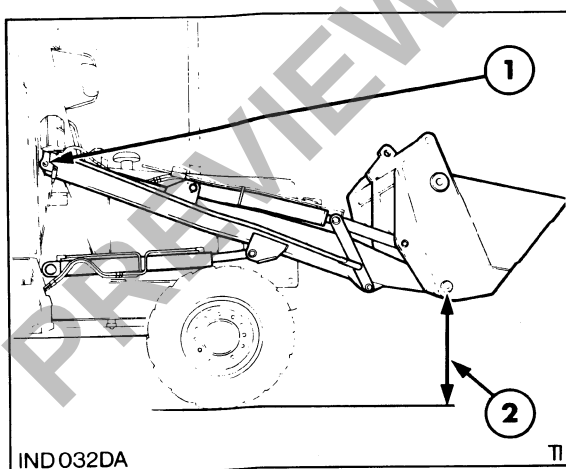
Lever right – loader bucket dump

‘Multi-purpose’ Bucket inset (where fitted)

Refer to page 9 of this section.

Lever knob rotate right – bucket closes

Lever knob rotate left – bucket opens



7. Hydro-Mechanical Self Levelling Linkage Dimensions

1. Bellcrank
2. Distance above ground level

Combinations of loader lift arm and bucket action can be obtained by moving the lever in a diagonal direction and/or rotating the knob to obtain movements simultaneously.

BACKHOE, CONTROLS AND OPERATION

- When digging in wet soil or mud and the bucket needs to be cleaned, do not knock the bucket against the ground with the dipperstick extended.
- Avoid overloading the backhoe by using too large a bucket in heavy soil conditions. Like any machine, if maximum capacity is maintained for extended periods, the life expectancy will be reduced. It is recommended that buckets no larger than 36 in (0.9 m) be used.
- Do not bottom-out the swing cylinder with the dipperstick extended.
- Avoid swinging the boom to dump material on the downhill side of the trench.
- Do not extend the dipperstick or use the side of the bucket to push material back into the trench.
- When operating with the dipperstick fully extended, ensure that the bucket does not receive a sharp impact which will cause distortion of the cylinder rod.
- When transporting or storing overnight, relieve the oil pressure in the extension cylinder. Close the extension completely and let the boom down until the bucket comes to rest on the ground. With the engine stopped, activate the control pedal to relieve any residual oil pressure in the extension cylinder.

 **WARNING:** Always lower the loader and backhoe buckets to the ground, shut off the engine and apply the parking brake before getting off the Unit. Never get off the Unit while it is in motion.

Trenching is the most basic backhoe digging operation. Other digging operations are merely variations of this basic function (i.e. filling the bucket, dumping the bucket, and moving the unit forward).

While trenching, it is generally important to maintain a level trench bottom. This is accomplished by setting the bucket at the proper angle of approach. As the bucket is crowding in, continuously push on the bucket lever to

maintain the correct cutting angle. At the same time, pull on the lift lever to relieve down pressure and keep the bucket in the same plane.

Continue the trench by moving forward. Moving too far will require excessive down pressure for digging, plus hand clean-up of the trench bottom. It is better to move a lesser amount than to move too far.

When using the backhoe for digging on slopes position the backhoe uphill wherever possible. If however, this is not practicable use the loader or backhoe to cut a level surface into the slope for the uphill wheel and stabilizer, and deposit the spoil from the slot onto the downhill side for the opposite wheel and stabilizer. When digging always deposit the spoil from the trench on the uphill side.

 **WARNING:** When excavating across a slope it is not possible to make use of the loader bucket for added stability. Do not overload the bucket and avoid swinging a loaded bucket to the downhill side of the slope.

To finish the far wall on a straight-walled excavation crowd out the bucket while forcing the bucket down the excavation with the boom. To finish the rear wall crowd in the bucket, while lifting with the boom, keeping the edges of the bucket horizontal.

When finishing straight walls in sandy soil, position a platform under the rear tires and stabilizers to distribute the load over a larger area and reduce the possibility of a cave-in. The platform will also reduce the possibility of the tractor creeping rearwards if hard digging is encountered.

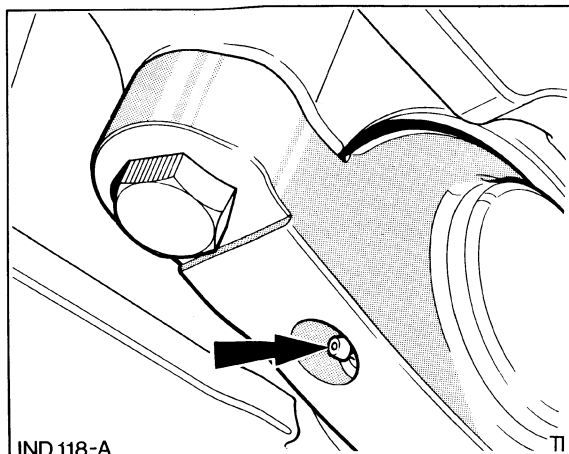
To backfill a trench lift the bucket over the spoil pile and then crowd in the dipperstick and lift the boom. Pull both the crowd and boom levers simultaneously for smooth even backfilling.

IMPORTANT: Do not backfill using the swing circuit and dragging the bucket sideways. Doing so can damage the dipstick, boom, swing cylinders or mainframe.

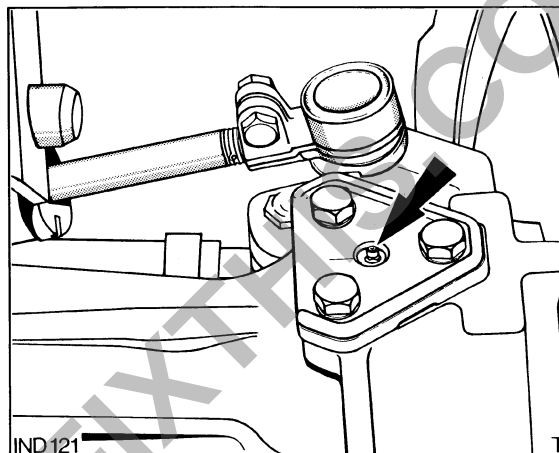
LUBRICATION AND MAINTENANCE

50 HOUR SERVICE (continued)

Grease the following lubrication fittings:

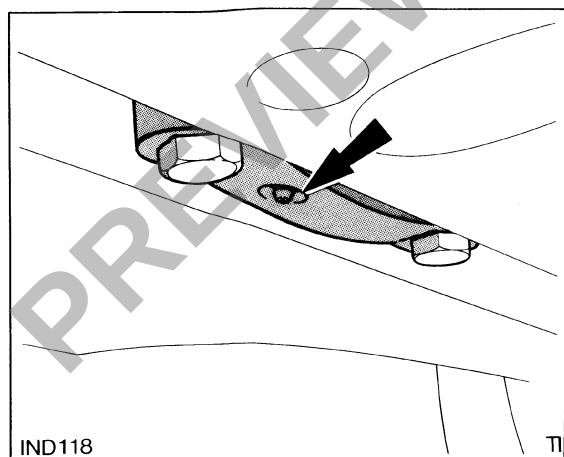


25. Front Axle Trunnion Bearing (two wheel drive)
Front point



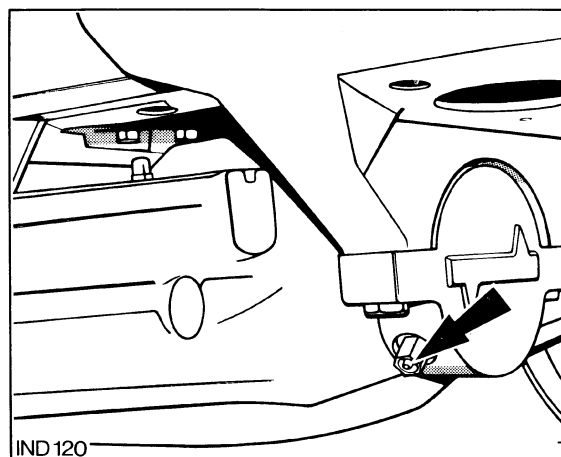
27. Front Axle Swivel Bearings (front wheel drive only)

Four points – left-hand swivel bearing shown. There is also a grease fitting on the lower swivel bearings.



26. Front Axle Trunnion Bearings (two wheel drive only)

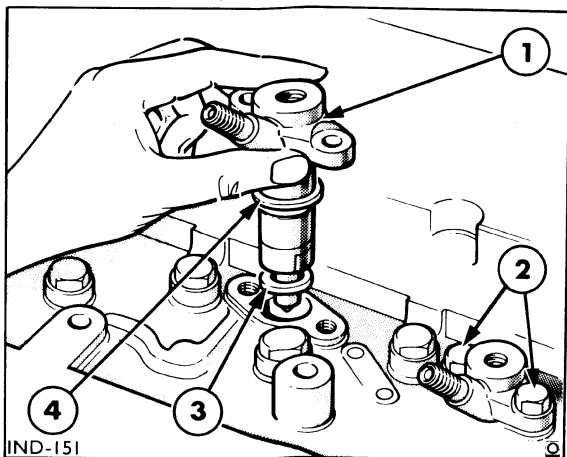
Rear point



28. Front Axle Trunnion Bearings (front wheel drive only)

Front point.

1200 HOUR SERVICE (continued)



68. Withdraw the injectors (1) after removing the bolts (2). Extract the copper sealing washer (3) from each injector locating bore and the cork dust washer (4) and discard them.

If a spare set of injectors is not immediately available, cover the ends of the pipes, the injector inlet and leak-off ports and the apertures in the cylinder head to prevent the entry of dirt.

Using new sealing and dust washers install the replacement injectors. Tighten the injector retaining bolts evenly to 17 lbf.ft. (22 Nm).

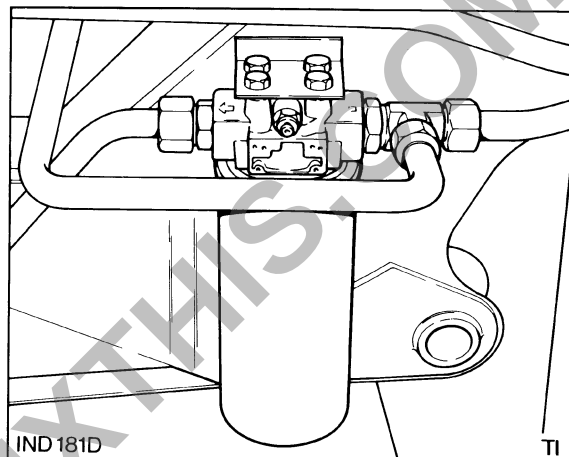
Re-connect the leak-off line using new washers either side of the banjo fittings and tighten the securing bolts to 6 lbf.ft. (8 Nm).

Re-connect the pump to injector pipes and tighten the connections to 18 lbf.ft. (24 Nm).

After replacing the injectors and pipes, prime the system (see operation 62).

The injectors which were removed should be serviced by your Dealer and retained for re-use at the next 1200 hour service.

NOTE: Modification or adjustment of fuel injection equipment outside specification may invalidate the warranty.



69. Hydraulic System Oil Filter

With the oil at operating temperature and the unit positioned on level ground with the loader bucket resting on the ground and the backhoe in the transport position, remove the oil filter (1) as previously described.

NOTE: Ensure that the receptacle used to drain the hydraulic oil into is capable of holding 21 U.S. Galls. (17.6 Imp. Galls. 80 Litres). Do not start the engine when the hydraulic system is drained as serious damage to the hydraulic pump will result.

SPECIFICATIONS

The general specifications given on the following pages are provided for your information and reference. Should you require further information or more detailed information consult your Dealer.

“Ford New Holland Inc., whose policy is one of continuous improvement, reserves the right to make changes in design and specifications at any time without notice and without obligation to modify units previously built.”

All data given in this manual is subject to production variations. Dimensions and weights are approximate only and the illustrations do not necessarily show tractors in standard condition. For exact information about any particular tractor please consult your Dealer.

PREVIEW ONLY

You're viewing 12 of 116 pages

The full manual includes:

- All 116 pages, complete
 - Searchable PDF (find any keyword)
 - No watermarks
 - Instant download
 - Print-ready quality
-

GET FULL MANUAL NOW

New Holland 555D, 575D, 655D, 675D Operator Manual



Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual